



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,017	06/25/2001	Khoi Hoang	60595-300901	2626

25696 7590 01/26/2005

OPPENHEIMER WOLFF & DONNELLY
P. O. BOX 10356
PALO ALTO, CA 94303

EXAMINER

WILLETT, STEPHAN F

ART UNIT	PAPER NUMBER
----------	--------------

2141

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,017

Applicant(s)

HOANG, KHOI

Examiner

Stephan F Willett

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,8-13,15,16,30-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-13,15,16,30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, “no request for said data on-demand program was sent from a receiving STB” is not enabled by Applicant’s Specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The statement “no request for said data on-demand program was sent from a receiving STB” is unclear since it directly contradicts “providing on-demand data”. Also, the STB must send a request to at least an antenna to receive broadcast data

Claim Rejections - 35 USC § 102

Art Unit: 2141

1. The following is a quotation of the appropriate paragraphs of 35 U. S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claim(s) 1-2, 8-13, are rejected under 35 U.S.C. 102(e) as being anticipated by Mills et al. with patent Number 6,055,560.

3. Regarding claim(s) 1, 8, Mills teaches broadcasting video, col. 7, lines 1-2. Mills teaches a delivery sequence for broadcast, col. 11, line 11-14; col. 3, lines 27-29, 58-59; col. 9, lines 27-35 and col. 14, lines 19-20, 28, 33-34 and 48-51. Mills teaches on-demand data delivery that is non-client specific, col. 5, lines 5-8. Mills teaches the amount of bandwidth, col. 3, lines 27-29; col. 2, lines 51-53 to enable control of the STB “independent of the number of subscribers”, col. 4, lines 2-3. Mills teaches broadcasting and implementing an EPG via a set top box, col. 11, lines 22-27; col. 15, lines 26-27. Mills teaches no request for the program is made by the STB, col. 3, lines 39-40.

4. Regarding claim 2, Mills teaches a matrix for sequencing data blocks of a data file, col. 8, lines 2-5 and 26-27 within one time slot as “queue timer interval”, col. 3, lines 59-60.

5. Regarding claim 9, Mills teaches decoding, decompressing, assembling and storing data blocks, col. 4, lines 14-16; col. 9, lines 14-15 as selected by the user, col. 10, line 67.

6. Regarding claim 10, Mills teaches output to a television, col. 15, lines 47-48.

7. Regarding claim 11, Mills teaches output to a monitor or terminal, col. 4, line 35.

8. Regarding claim 12, Mills teaches output to a VCR, col. 9, line 49.

9. Regarding claim 13, Mills teaches output to a computer, col. 2, line 10.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. with patent Number 6,055,560 in view of Krause et al. with Patent Number 5,926,205.

12. Regarding claim(s) 15, Mills teaches broadcasting video, col. 7, lines 1-2. Mills teaches a delivery sequence for broadcast, col. 11, line 11-14; col. 3, lines 27-29, 58-59; col. 9, lines 27-35 and col. 14, lines 19-20, 28, 33-34 and 48-51. Mills teaches on-demand data delivery that is non-client specific, col. 5, lines 5-8. Mills teaches the amount of bandwidth, col. 3, lines 27-29 to enable control of the STB “independent of the number of subscribers”, col. 4, lines 2-3. Mills teaches broadcasting and implementing an EPG via a set top box, col. 11, lines 22-27; col. 15, lines 26-27. Mills teaches the invention in the above claim(s) except for explicitly teaching transmitting over a 2nd channel. In that Mills operates to provide on-demand video, the artisan would have looked to the scheduling arts for details of implementing video resourcing. In that art, Krause, a related network video scheduler, teaches “multiple overlapping presentations of the same video program”, col. 5, lines 55-56 in order to provide on-demand video. Krause specifically teaches second channels as “subchannel”, col. 6, line 61; col. 14, lines 30-31, 35-36, 42-43. Further, Krause suggests that “a video program is typically organized as an ordered

Art Unit: 2141

sequence of scenes or frames", col. 6, lines 10-11 which will result from implementing his scheduling. The motivation to incorporate combined channels insures that data can be supplied on demand. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the channels as taught in Krause into the scheduling system described in the Mills patent because Mills operates with scheduled matrix type data and Krause suggests that optimization can be obtained when combining matrices with channels to timely achieve the redundant programs. Therefore, by the above rational, the above claim(s) are rejected.

13. Regarding claim 16, Mills teaches a matrix for sequencing data blocks of a data file, col. 8, lines 2-5 and 26-27 within one time slot as "queue timer interval", col. 3, lines 59-60.

14. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. with patent Number 6,055,560 in view of Krause et al. with Patent Number 5,926,205.

Regarding claim(s) 30, Mills teaches broadcasting video, col. 7, lines 1-2. Mills teaches a delivery sequence for broadcast, col. 11, line 11-14; col. 3, lines 27-29, 58-59; col. 9, lines 27-35 and col. 14, lines 19-20, 28, 33-34 and 48-51. Mills teaches on-demand data delivery that is non-client specific, col. 5, lines 5-8. Mills teaches the amount of bandwidth, col. 3, lines 27-29 to enable control of the STB "independent of the number of subscribers", col. 4, lines 2-3.

Mills teaches broadcasting and implementing an EPG via a set top box, col. 11, lines 22-27; col. 15, lines 26-27. Mills teaches the invention in the above claim(s) except for explicitly teaching optimizing bandwidth. In that Mills operates to provide on-demand video, the artisan would have looked to the scheduling arts for details of implementing video resourcing. In that art, Krause, a related network video scheduler, teaches "multiple overlapping presentations of the same video program", col. 5, lines 55-56 in order to provide on-demand video. Krause

Art Unit: 2141

specifically teaches “this process continues until the resulting compressed data stream falls within the requisite bandwidth”, col. 11, lines 51-55 or col. 12, lines 17-23 . Further, Krause suggests that “ a video program is typically organized as an ordered sequence of scenes or frames”, col. 6, lines 10-11 which will result from implementing his scheduling. The motivation to incorporate bandwidth optimization insures that data can be supplied on demand. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the optimized bandwidth as taught in Krause into the scheduling system described in the Mills patent because Mills operates with scheduled matrix type data and Krause suggests that optimization can be obtained when combining matrices with legacy bandwidth optimization techniques to timely achieve the redundant programs. Therefore, by the above rational, the above claim(s) are rejected.

15. Regarding claim 31, Mills teaches a matrix for sequencing data blocks of a data file, col. 8, lines 2-5 and 26-27 within one time slot as “queue timer interval”, col. 3, lines 59-60.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2141

2. Claims 8, 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Durana et al. with Patent Number 6,018,765 in view of Birk et al. with patent Number 6,502,139.

3. Regarding claim(s) 8, 15, Durana teaches a video on demand based communication network. Durana teaches a broadcast medium, col. 3, lines 56-58. Durana teaches digital broadcast circuitry for a first channel to generate digital broadcast data, col. 4, lines 28-29. Durana teaches digital broadcast circuitry for a second channel to generate VOD, col. 5-6, lines 68-1. Durana teaches a central control server to control data sent, col. 4, lines 12-15 and to generate an EPG of data sent on said channels, col. 4, lines 8-10. Durana teaches an STB coupled to said broadcast medium to decode requested data to an STB, col. 4, lines 4-8, 18-21. Durana teaches on request for the program is made by the STB, col. 3, lines 56-58. Durana teaches a channel server to select a channel, col. 3-4, lines 56, 66-3 and a delivery matrix as “combining data”, col. 3, lines 65-66 that can be updated off-line at the server as “reset”, col. 8, lines 26-27 and at col. 7, lines 24-25, 32-33. Birk teaches calculating a delivery matrix also, col. 4, lines 54-58. Durana teaches the invention in the above claim(s) except for explicitly teaching a universal broadcast system uni-directionally coupled to said broadcast medium. In that Durana operates to generate service requests with a n STB, the artisan would have looked to the server arts for details of implementing downloading of video. In that art, Birk, a related network video player, teaches “even networks that have only one-way communication”, col. 2, lines 8-9 in order to provide the requested video. Birk specifically teaches “no feedback from the viewing client;”, col. 2, line 9. Further, Birk suggests that “partitioning the program into several segments”, col. 2, lines 22-23 will enable better control by the STB. The motivation to incorporate uni-directionally transmission insures that legacy video distribution is supported

Art Unit: 2141

Thus, it would have been obvious to one of ordinary skill in the art to include uni-directionally transmission as taught in Birk into the video server described in the Durana patent because Durana operates with STBs and Birk suggests that optimization can be obtained with their STB server system. Therefore, by the above rational, the above claim(s) are rejected.

Response to Amendment

1. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.
2. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.
3. Applicant suggests "though this may occasionally occur in the systems in Mills", Paper filed 10/5/04, Page 5, lines 6-7. If the reference teaches it only once, then this reads on the claims. Also, the next sentence states "only by implementing a uni-directional client server can", etc., seems to contradict the other claims. Lastly, as we discussed, any broadcast or bandwidth "is independent of the number of clients" since Newton's Telecom dictionary states broadcast is "to transmit information ... to any ... [device] capable of receiving a signal". Also, Mills teaches the amount of bandwidth as "broadcast", col. 3, lines 27-29; and "transmission bandwidth", col. 2, lines 51-53, by default since number of clients is not dependent on bandwidth when broadcasting. Thus, Applicant's arguments can not be held as persuasive regarding patentability.
4. Applicant suggests "on demand data only to requesting users", Paper filed 10/5/04, Page 5, line 33. However, this can not be found in Krause, and as discussed above, such a statement

Art Unit: 2141

contradicts the definition of broadcast which is sent to everyone. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested. A close review of the Kermode reference with Patent Number 6,018,359 and Fibonacci sequences is suggested. The other references cited teach numerous other ways to perform unidirectional transmission of video with STB VCR type video control, thus a close review of them is suggested.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2141

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (571) 272-3890. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.
7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.
8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

sfw

January 10, 2005


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER